82-117

UNIMAT

FOR HOME AND INDUSTRY

AMERICAN EDELSTAAL, INC. • UNIMAT DIVISION

350 Broadway, New York City 13, New York

82
117

WORLD FAMOUS UNIMAT

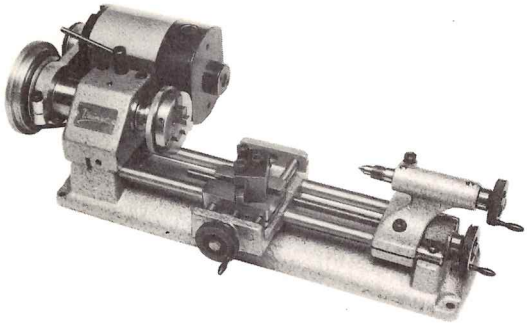
A 10-IN-1 WORKSHOP

Unimat is a precision tool designed for craftsmen, engineers, hobbyists and model makers. No bigger than a typewriter, Unimat is a combination of 10 tools in 1, operating on just one base. It's universally acclaimed as the finest tool ever developed for machining small parts made of metal, wood or plastic. The motor you receive with Unimat is the finest available and guarantees powerful, smooth running and trouble free operation, designed to operate on either AC/DC 110 Volt current. The motor pulley sheaves and belts provide 11 different speeds (from 375 rpm to 6000 rpm). Unimat is a rugged, portable machine that will provide a lifetime of satisfaction.

DB 200 UNIMAT BASIC UNIT

Basic unit consists of the precision lathe and all components necessary to set up Drill Press, Milling Machine, Tool and Surface Grinding Machine, Hand Drill, Grinding and Polishing Machine as illustrated. Also included with the basic unit are the following parts: Motor. An upright steel drill press post. A universal 3 jaw, self centering 'Cushman' type lathe chuck (jaws reverse). A 3 jaw 'Jacobs' type ¼" capacity drill chuck. A pivoting tool post. 2 dead centers. Face plate. Lathe dog. Grindstone arbor. Allen wrench. Easy to follow instructional manual. Unimat basic unit comes handsomely packaged in sturdy, wood veneer storage chest. Complete basic unit $99.50.

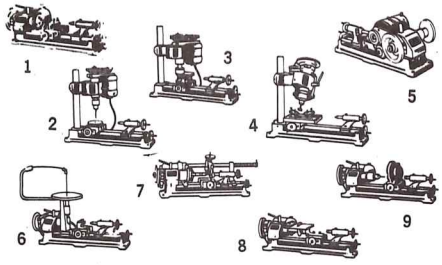
GIVE THIS INGENIOUS MACHINE TOOL JUST SIXTEEN INCHES AND YOU'VE GOT IT MADE!



precision
workshop-in-miniature
saves time and money

UNIMAT

MANUFACTURERS developing new products find Unimat indispensable in the mock-up shop. No need to waste big, expensive-to-run machinery on tooling small parts. ENGINEERS and DESIGNERS supplement their sketches and blueprints with machined-to-scale models anybody can "read." TECHNICIANS in research labs turn out machine work with amazingly small tolerances, down to .0004-of-an-inch! Hundreds* of efficiency-minded companies, hospitals and government agencies are now putting their UNIMATS to a thousand-and-one-uses; let us tell you how they can serve *you*.



Attachments and accessories that turn Unimat into a **complete** machine shop: **1.** Lathe **2.** Drill Press **3.** Tool and Surface Grinding Machine **4.** Milling Machine **5.** Polishing and Grinding Machine **6.** Jig Saw **7.** Threader **8.** Circular Saw **9.** Indexer and Divider.

AMERICAN-EDELSTAAL, UNIMAT DIV.
350 Broadway, N. Y. 13, N. Y.

a partial list of **UNIMAT** users

Atom Products Div. (GE)
Bell Telephone Laboratories
Light & Motion, Inc.
Marathon Corp.
Westinghouse Electric Corp.
Mechtronics Corp.
Solrol Mfg. Co.
Raytheon
General Electric

U.S. Naval Research
Army Corps of Engineers
U.S. Army Ordinance
U.S. Marine Corps
U.S. Air Force

New York Medical College
Mount Zion Hospital
Veteran's Administration Hospitals
Bio-Analytical Laboratories
N.Y.U. Bellevue Medical Center
University of Oregon Medical School
U.S. Naval Aviation Medical Center
Texas Medical Branch
St. Joseph Hospital
Wyeth Institute for Medical Research

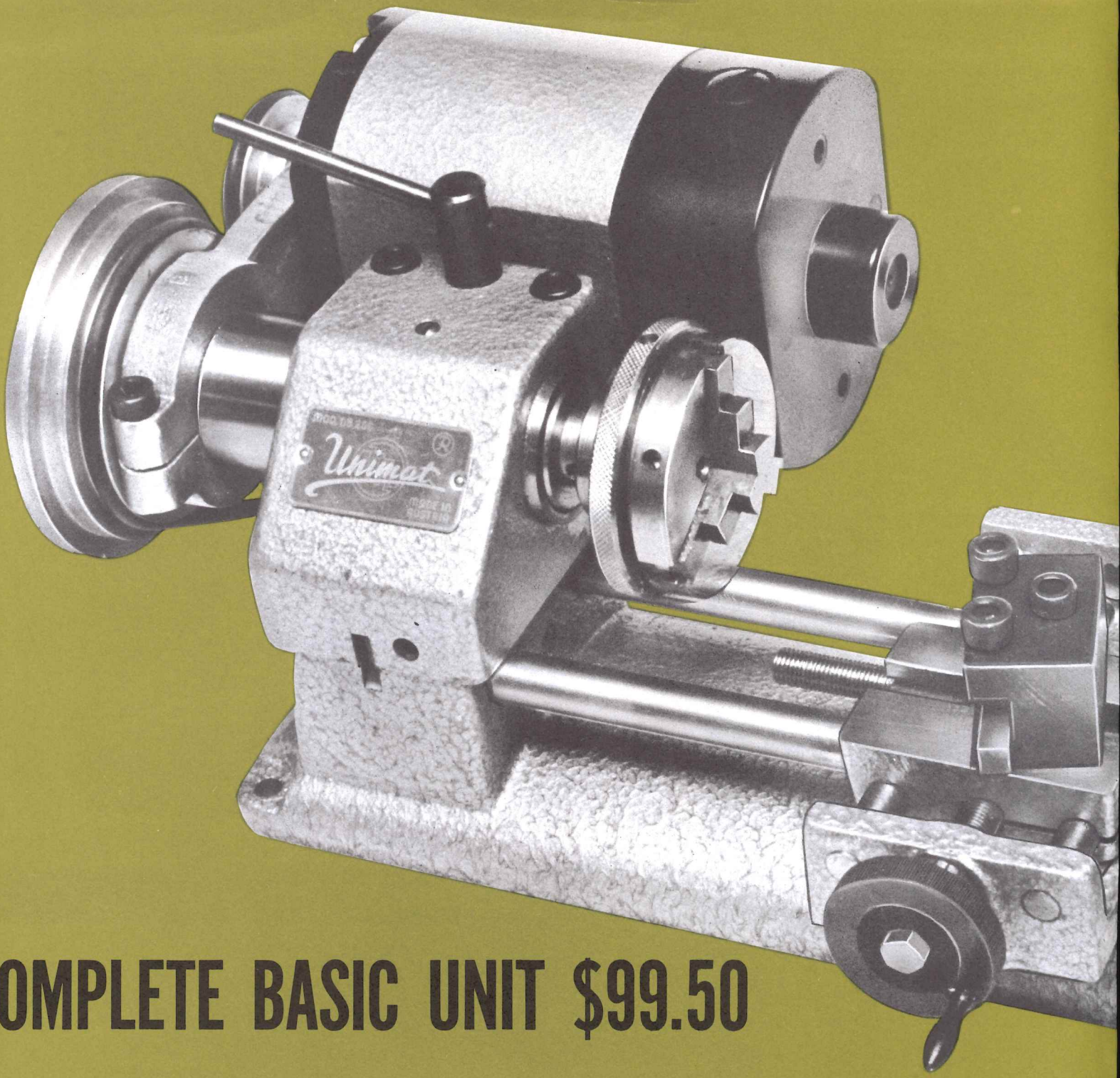
Socony Mobil Oil Co.
Dow Chemical
National Carbon
Warner-Chilcott
Union Carbide

University of Wisconsin
University of Oregon
Institute Divi Thomae Foundation
University of Buffalo
University of Michigan
University of Minnesota
Georgia Institute of Technology
Smithsonian Institute
Ill. Institute of Technology

Proctor & Gamble
Philip Morris
General Motors
Paragon Wire & Cable Corp.
W.E. Dillon & Co., Inc.
General Electric
Kemtron Products
Lone Star Steel Co.
Herkimer Tool & Die Works
LaForche Tractor Co.
Precision Contact Lens Co.
Omega Industries
Exacta Camera Corp.
Interlock Corp.
Harvey Hubbell Inc.
Westinghouse Electric Corp.

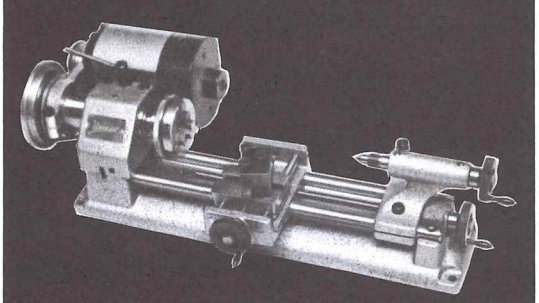
Weston Instrument
Federal Instrument Corp.
Starex Instrument Co.

Pratt & Whitney
Northrop Aircraft, Inc.
Ramo-Woolridge Corp.
Sandia Corp.



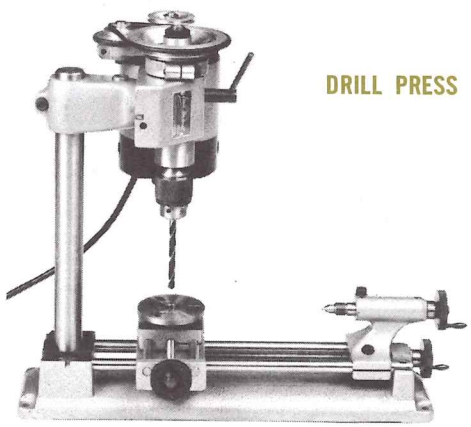
COMPLETE BASIC UNIT $99.50

LATHE



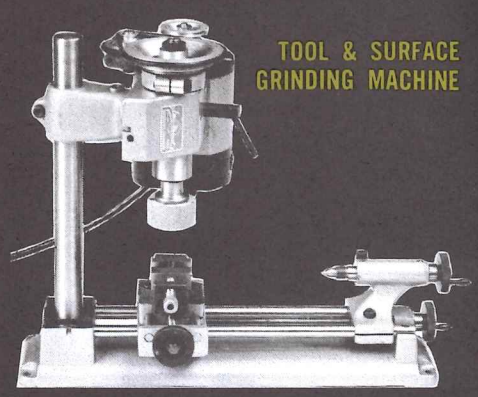
The Unimat precision lathe is a well designed, quality engineered Unit that will enable you to perform standard lathe operations in all metals, woods and plastics. A unique construction principle enables the head stock to pivot in either direction permitting turning of tapered surfaces. Official tests have found Unimat to give tolerances of .0004″.

DRILL PRESS

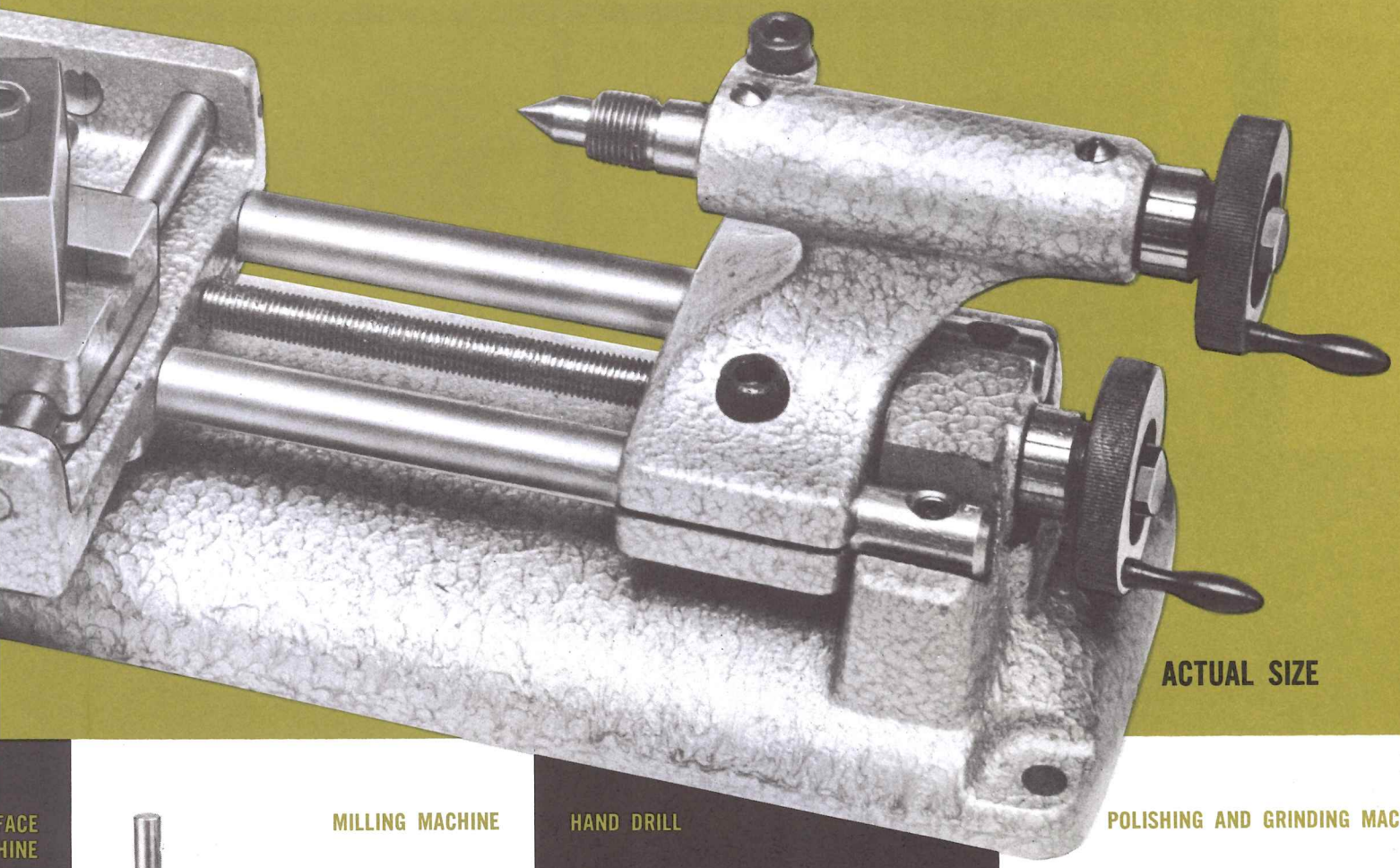


Drill press sets up easily by mounting drill press post and head stock in vertical position. Head stock features built in rack enabling 1″ stroke. Motor and head stock unit movable up and down on column. Pivoting head stock permits drilling at any angle. Face plate mounted on cross slide can be used as table as illustrated. (Lathe chuck can be mounted in the same manner as the face plate and used as a vise.)

TOOL & SURFACE GRINDING MACHINE



Grindstone arbor is attached to head stock which may be mounted in any position both on the bed and on the vertical steel column as illustrated. Will simplify exact grinding of the most complicated tools and surfaces, because headstock can be set at any desired angle. (Clamping vise illustrated is additional. See back page.)



ACTUAL SIZE

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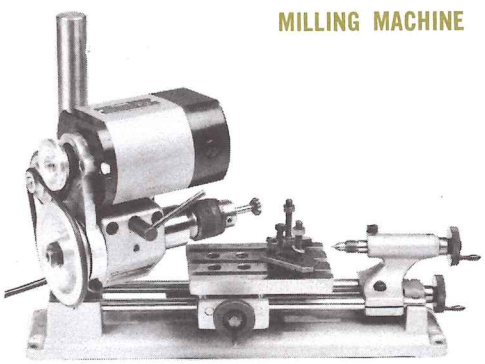
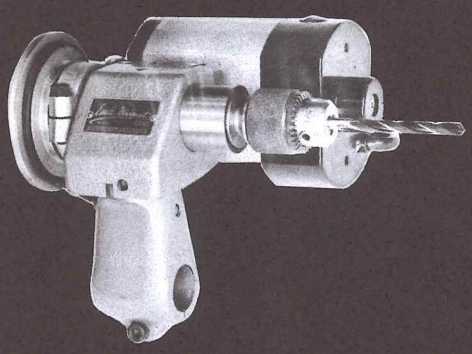
MILLING MACHINE



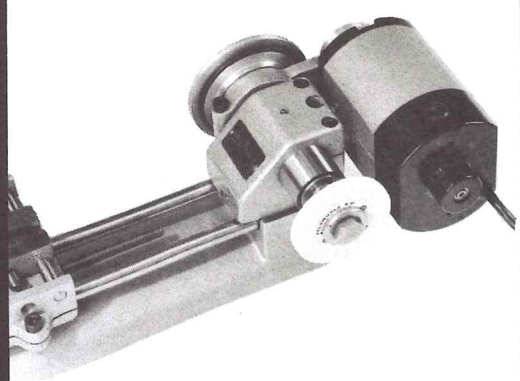
Unimat may be used as both a horizontal and vertical milling machine. Pivoting head stock enables milling of slots, grooves, bevels and key ways on all surfaces. Especially useful for milling prisms and wide angle work. (Milling table shown is additional. See back page.)

HAND DRILL

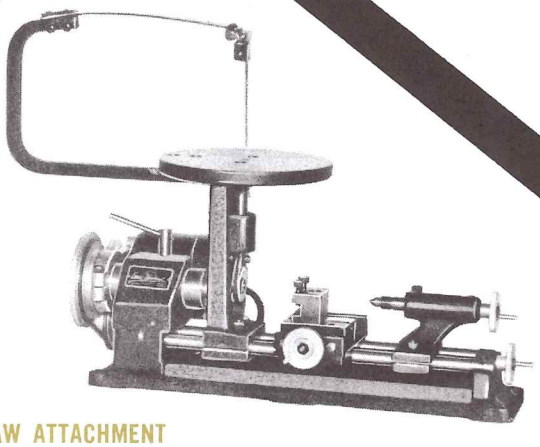


Removable head stock and motor unit becomes the only portable hand drill or polisher in the world with 11 variable speeds (375 rpm to 6000 rpm).

POLISHING AND GRINDING MACHINE

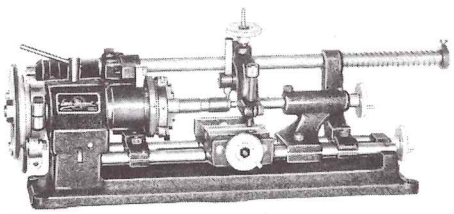


With headstock and motor unit pivoted at right angle to the lathe bed, Unimat becomes a conventional grinding or polishing machine.



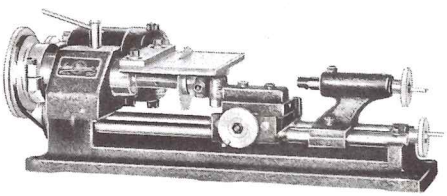
DB 107 JIG SAW ATTACHMENT

For sawing metal, wood or plastic at various speeds. Throat capacity: 8″. Equipped with 12 assorted blades. Replacement blades available. **$19.00**



DB 1270 THREADING ATTACHMENT

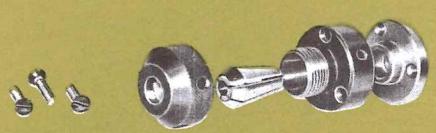
Cuts threads by means of interchangeable leader patterns and chasers. Included are formed tool bit and 3 patterns for ¼″, ⅜″ and 5/16″ NC. Other patterns available for NC, NF, BSW, and Metric threads. $3.90 each. Also see DB 1270c and DB 1105f. **$31.50**



DB 1230 CIRCULAR SAW ATTACHMENT

4″ x 3½″ table mounts on cross slide. Complete with fence, 1 metal and 1 wood cutting blade. Truing arbor to spindle prevents blade oscillation. Replacement blades available. **$9.50**

DB 1020 COLLET HOLDER AND ¼″ COLLET CHUCK

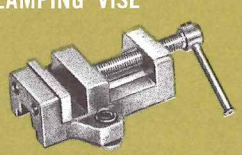


For precision turning, drilling or milling. Truing holder to spindle prevents oscillation of chucked piece. Additional collet chucks available (DB 1020a): 1/32; 1/16; 3/32; ⅛; 5/32; 3/16; 7/32; 9/32; and 5/16″. Metric sizes: 1mm through 8mm. $3.90 each chuck. **$12.00**

DB 1210 MILLING TABLE

Aids in milling of complex shapes. 5″ x 3″ table mounts on cross slide in many different positions. Equipped with 2 sets of clamps. Clamping vise (DB 1010) can be mounted on table in place of clamps. **$8.50**

DB 1010 CLAMPING VISE



Vise jaws have horizontal and vertical V cuts. Holds all work firmly for machining. Reach of jaws: 1⅛″. Mounts on cross slide or milling table (DB 1210). **$6.50**

DB 1030 POLISHING ARBOR

Length 4″. For mounting various types grinding and buffing accessories. Truing arbor to spindle prevents oscillation. **$9.50**

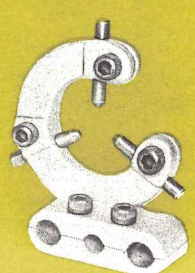
DB 1250 FLEXIBLE SHAFT

3⅓′ long, mounts on headstock spindle. Drill chuck, grindstone arbor, collet holder, polishing arbor, etc., can be mounted on free end. Permits greater flexibility in drilling, engraving, grinding, etc. **$19.50**

DB 1270c REDUCTION GEAR

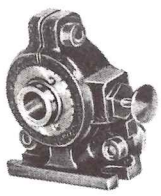
Precision casting with additional double ball bearing idler gear reduces spindle speeds as low as 155 r.p.m. Especially recommended for thread cutting in hard metal. **$8.50**

DB 1040 STEADY REST



Especially useful for machining long or flexible stock. Easily centered, accommodates work up to 1½″ D. **$12.00**

HMENTS & ACCESSORIES



DB 1260 INDEXING & DIVIDING ATTACHMENT

Mounts horizontally or vertically on cross slide. Permits precision spacing and cutting of toothed gears. Includes table (shown) and 3 sets of clamps. The 3 jaw lathe chuck can be mounted on indexing head in place of table. DB 1260 gives divisions of 2, 3, 4, 6, 8, 12 and 24. DB 1260a gives divisions of 2, 3, 5, 6, 10, 15 and 30. **$15.50**

SPECIFICATION SHEET

UNIMAT:

Basic Unit. Model DB 200.

LATHE:

Bed dimensions. Length: 14½″; width: 3⅓″; height: 5″.

Work capacity. Between centers: 6.83″; swing above carriage: 1.58″; Swing over bed: 3″. Center in spindle—straight shank. Hole through spindle: ¼″. Tailstock threaded for mounting lathe or drill chuck. Center in tailstock—straight shank. Tailstock travel: 6½″. Tailstock ram travel: ¾″. Carriage travel: 6½″. Cross slide travel: 2″. Carriage and cross feed screw: .002″ per micro-division. Weight of Basic Unit: 28 lbs.

Construction. Finest hardened and ground tool steel. The cast iron bed is ribbed for extra strength. Headstock is equipped with 2 sets of pre-loaded steel ball bearings. See drawing below.

Power. Derived through 110-115 volt AC/DC motor. HP approximately 1/15. Motor speed at full load: 4,000 r.p.m. Pulley system gives 11 variable speeds from 375 r.p.m. to 6,000 r.p.m. Motor is completely balanced with 24 segment commutator. Will not interfere with radio or TV.

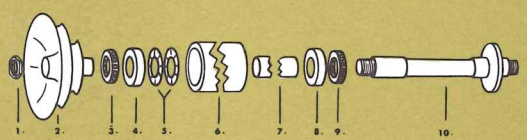
DRILL PRESS AND MILLING:

Maximum chuck to base: 5″. Spindle travel through built-in rack is 1″. Chuck to column: 3 1/16″.

CHUCKS:

3 jaw universal lathe chuck (jaws reverse) Cushman type, factory trued. Capacity: mounted on spindle: 2¼″. This chuck can also be mounted on cross slide and used as a vise to hold round stock for drilling or milling. Drill chuck, Jacobs type, capacity ¼″.

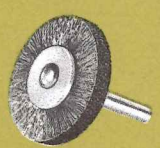
ASSEMBLY VIEW OF HEADSTOCK
(Parts shown in order of disassembly)



1. Pulley nut
2. Pulley
3. Ball bearing, retainer, inner race
4. Bearing race, outside
5. Bellville washers
6. Spindle housing
7. Spacer
8. Bearing race, outside
9. Ball bearing, retainer, inner race
10. Spindle shaft

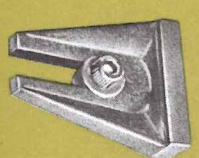
CUTTING TOOL ACCESSORIES

WIRE BRUSH



1⅝″ diameter. For precision finishing.
DB 1150 — Copper. **$2.10**
DB 1151 — Steel. **$1.95**

DB 1201 STEADY

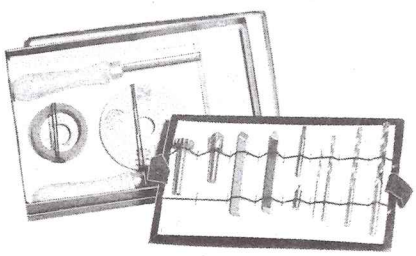


For steadying hand held wood gravers. **$1.50**

LIVE CENTER

For precision finishing.
DB 1220 — with single ball bearing. **$3.50**
DB 1220a — with double ball bearing. **$4.50**

DB 1099 TOOL BOX, complete* $13.50

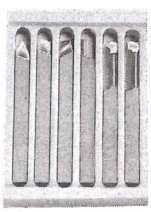


consists of following items, available separately.

DB 1099a	Tool Bit—left hand finishing knife (same as DB 1105a, below)	1.50
DB 1099b	Tool Bit—roughing knife (same as DB 1105b, below)	1.50
DB 1099c-f	Drill Bits, 4 assorted	1.20
DB 1099g	Standard Grindstone (corundum)	1.00
DB 1099h	Cup Grindstone (corundum)	1.30
DB 1099i	Milling Cutter (end mill)	1.30
DB 1099j	Milling Cutter (slots, key-ways)	2.40
DB 1099k	Countersink Bit 90	1.90
DB 1099l	Center Drill Bit	.60
DB 1099m	Wood Graver, pointed	1.10
DB 1099n	Wood Graver, flat	1.10

*NOTE: No substitutions can be made on complete tool set DB 1099

DB 1105 SET OF 6 TOOL BITS, complete* $8.50



consists of following 6 bits, available separately.

DB 1105a	Tool Bit—left hand finishing knife (same as DB 1099a, above)	1.50
DB 1105b	Tool Bit—roughing knife (same as DB 1099b, above)	1.50
DB 1105c	Tool Bit—right hand finishing knife	1.50
DB 1105d	Boring Bar	2.00
DB 1105e	Parting-off Tool	1.50
DB 1105f	Inside Thread Cutting Tool (same as DB 1270a, above)	2.00

*NOTE: No substitutions can be made on complete tool set DB 1105.

DB 1160 TRUING DIAMOND

For dressing grindstones With attachments. **$6.50**

DB 1122 DISH GRINDSTONE

$1.30